

ABSTRACT

The present invention provides a method, system and apparatus for managing data flow over an open system interconnection type network (10) which includes a physical layer (12) and a media access control layer (146). The invention implements a plurality of operating modules (315) each enabling a respective media access control layer operating function in which at least a portion of the operating modules are implemented in software. The invention further implements a host interface module (305) for communication between a host processor and the media access control layer, a physical layer interface module (310) for communication between the physical layer and media access control layer, and an inter-module programming interface for communications between respective operating modules. The physical layer interface includes an enhanced media independent interface in accordance with some embodiments of the present invention.